

71RCE
Step 1
5-22-03

PTO/SB/30 (01-03)

Approved for use through 04/30/2003. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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**Request
For
Continued Examination (RCE)
Transmittal**

Address to:
Commissioner for Patents
Box RCE
Washington, DC 20231

| | |
|------------------------|------------------|
| Application Number | 09/853,190 |
| Filing Date | 5-11-2001 |
| First Named Inventor | Tawassul A. Khan |
| Art Unit | 2862 |
| Examiner Name | Toan M. Le |
| Attorney Docket Number | |

This is a Request for Continued Examination (RCE) under 37 CFR 1.114 of the above-identified application. Request for Continued Examination (RCE) practice under 37 CFR 1.114 does not apply to any utility or plant application filed prior to June 8, 1995, or to any design application. See Instruction Sheet for RCEs (not to be submitted to the USPTO) on page 2.

1. Submission required under 37 CFR 1.114

- a. ☐ Previously submitted
- i. ☐ Consider the amendment(s)/reply under 37 CFR 1.116 previously filed on _____
(Any unentered amendment(s) referred to above will be entered).
- ii. ☐ Consider the arguments in the Appeal Brief or Reply Brief previously filed on _____
- iii. ☐ Other _____
- b. ☒ Enclosed
- i. ☒ Amendment/Reply
- ii. ☐ Affidavit(s)/Declaration(s)
- iii. ☐ Information Disclosure Statement (IDS)
- iv. ☐ Other _____

2. Miscellaneous

- a. ☐ Suspension of action on the above-identified application is requested under 37 CFR 1.103(c) for a period of _____ months. (Period of suspension shall not exceed 3 months; Fee under 37 CFR 1.17(i) required)
- b. ☐ Other _____

3. Fees

- The RCE fee under 37 CFR 1.17(e) is required by 37 CFR 1.114 when the RCE is filed.
The Director is hereby authorized to charge the following fees, or credit any overpayments, to
- a. ☐ Deposit Account No. _____
- i. ☐ RCE fee required under 37 CFR 1.17(e)
- ii. ☐ Extension of time fee (37 CFR 1.136 and 1.17)
- iii. ☐ Other _____
- b. ☐ Check in the amount of \$ _____ enclosed
- c. ☒ Payment by credit card (Form PTO-2038 enclosed)

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

| | |
|--|-----------------------------------|
| SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT REQUIRED | |
| Name (Print/Type) <i>Sofia K. McGuire</i> | Registration No. (Attorney/Agent) |
| Signature <i>Sofia K. McGuire</i> | Date <i>5-13-03</i> |
| CERTIFICATE OF MAILING OR TRANSMISSION | |
| I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner For Patents, Box RCE, Washington, DC 20231, or facsimile transmitted to the U.S. Patent and Trademark Office on the date shown below. | |
| Name (Print/Type) <i>Sofia K. McGuire</i> | VIA FAX |
| Signature <i>Sofia K. McGuire</i> | Date <i>5-13-03</i> |

This collection of information is required by 37 CFR 1.114. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Box RCE, Washington, DC 20231.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

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TECHNOLOGY CENTER

PTO/SB/17 (01-03)
Approved for use through 04/30/2003. OMB 0851-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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FEE TRANSMITTAL for FY 2003

Effective 01/01/2003. Patent fees are subject to annual revision.

☒ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$)**375.00**

Complete if Known

Application Number **09/853,190**
Filing Date **5-11-01**
First Named Inventor **Tawassul A. Khan**
Examiner Name **Toan M. Le**
Art Unit **2862**
Attorney Docket No.

METHOD OF PAYMENT (check all that apply)

☐ Check ☒ Credit card ☐ Money Order ☐ Other ☐ None

☐ Deposit Account:

Deposit Account Number
Deposit Account Name

The Commissioner is authorized to: (check all that apply)

☐ Charge fee(s) indicated below ☐ Credit any overpayments
☐ Charge any additional fee(s) during the pendency of this application
☐ Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.

FEE CALCULATION

1. BASIC FILING FEE

| Large Entity Fee Code (\$) | Small Entity Fee Code (\$) | Fee Description | Fee Paid |
|-------------------------------|-------------------------------|------------------------|----------|
| 1001 750 | 2001 375 | Utility filing fee | |
| 1002 330 | 2002 165 | Design filing fee | |
| 1003 520 | 2003 260 | Plant filing fee | |
| 1004 750 | 2004 375 | Reissue filing fee | |
| 1005 160 | 2005 80 | Provisional filing fee | |

SUBTOTAL (1) (\$)**0**

2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

Total Claims -20** = X =
Independent Claims -3** = X =
Multiple Dependent =

| Large Entity Fee Code (\$) | Small Entity Fee Code (\$) | Fee Description | Fee Paid |
|-------------------------------|-------------------------------|--|----------|
| 1202 18 | 2202 9 | Claims in excess of 20 | |
| 1201 84 | 2201 42 | Independent claims in excess of 3 | |
| 1203 280 | 2203 140 | Multiple dependent claim, if not paid | |
| 1204 84 | 2204 42 | ** Reissue independent claims over original patent | |
| 1205 18 | 2205 9 | ** Reissue claims in excess of 20 and over original patent | |

SUBTOTAL (2) (\$)**0**

**or number previously paid, if greater; For Reissues, see above

FEE CALCULATION (continued)

3. ADDITIONAL FEES

Large Entity Small Entity

| Fee Code (\$) | Fee Code (\$) | Fee Description | Fee Paid |
|---------------|---------------|--|------------|
| 1051 130 | 2051 65 | Surcharge - late filing fee or oath | |
| 1052 50 | 2052 25 | Surcharge - late provisional filing fee or cover sheet | |
| 1053 130 | 2053 130 | Non-English specification | |
| 1812 2,520 | 2812 2,520 | For filing a request for ex parte reexamination | |
| 1804 920* | 2804 920* | Requesting publication of SIR prior to Examiner action | |
| 1805 1,840* | 2805 1,840* | Requesting publication of SIR after Examiner action | |
| 1251 110 | 2251 55 | Extension for reply within first month | |
| 1252 410 | 2252 205 | Extension for reply within second month | |
| 1253 930 | 2253 465 | Extension for reply within third month | |
| 1254 1,450 | 2254 725 | Extension for reply within fourth month | |
| 1255 1,970 | 2255 985 | Extension for reply within fifth month | |
| 1401 320 | 2401 160 | Notice of Appeal | |
| 1402 320 | 2402 160 | Filing a brief in support of an appeal | |
| 1403 280 | 2403 140 | Request for oral hearing | |
| 1451 1,510 | 2451 1,510 | Petition to institute a public use proceeding | |
| 1452 110 | 2452 55 | Petition to revive - unavoidable | |
| 1453 1,300 | 2453 650 | Petition to revive - unintentional | |
| 1501 1,300 | 2501 650 | Utility issue fee (or reissue) | |
| 1502 470 | 2502 235 | Design issue fee | |
| 1503 630 | 2503 315 | Plant issue fee | |
| 1460 130 | 2460 130 | Petitions to the Commissioner | |
| 1807 50 | 2807 50 | Processing fee under 37 CFR 1.17(q) | |
| 1806 180 | 2806 180 | Submission of Information Disclosure Stmt | |
| 8021 40 | 28021 40 | Recording each patent assignment per property (times number of properties) | |
| 1809 750 | 2809 375 | Filing a submission after final rejection (37 CFR 1.129(a)) | |
| 1810 750 | 2810 375 | For each additional invention to be examined (37 CFR 1.129(b)) | |
| 1801 750 | 2801 375 | Request for Continued Examination (RCE) | 375 |
| 1802 900 | 2802 900 | Request for expedited examination of a design application | |

Other fee (specify)

*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$)**375**

SUBMITTED BY

Name (Print/Type) **Sofia K. McGuire**
Signature **Sofia K. McGuire**

Registration No.
(Attorney/Agent)

(Complete if applicable)

Telephone **713-942-7926**

Date **5-13-03**

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MAY 14 2003



TAWASSUL A. KHAN
C.E.O.

81B
T. Septor
5-22-03
NONLINEAR SEISMIC IMAGING, INC.

3200 Southwest Freeway • Suite 2340 • Houston, Texas 77027
713.552.2727 • Fax: 713.521.2873
email: tkhan@houston.rr.com

SENT VIA FACSIMILE 703/872-9318

September 18, 2002

Toan M. Le, Examiner
Box PATENT APPLICATION
Commissioner for Patents
Washington, DC 20231

**RE: Application No. 09/853,190
Applicant Tawassul A. Khan (Inventor)
Titled - Mapping Permeable Reservoir Formations by Measuring the
Elastic Nonlinear Interactions of a Seismic Wave as it Propagates
through the Reservoir Rock Matrix and its Pore Fluids.**

Dear Mr. Le:

Enclosed is the Reply to USPTO Office Action Summary of March 18, 2003 regarding Application No. 09/853,190.

We have enclosed the following items to better explain the side lobe phenomenon:

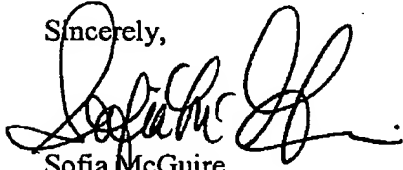
- Amended Claims
- An Example of Crosswell Data Showing Frequency Side-Lobes due to Permeability, including actual Test Results
- Transmittal Form
- Request for Continued Examination
- Fee Transmittal
- Credit Card Payment Form

If you would prefer to meet with us face to face, we are able to come to your office to explain the entire concept to clarify any question you may have regarding the claims and specification. We appreciate your suggestion of hiring a registered patent attorney; we

are not ignoring your recommendation. Financially, we cannot afford to hire an attorney at this time – Nonlinear Seismic Imaging, Inc. has no revenue currently.

Thank you for your consideration in this matter. Please do not hesitate to contact me at 713/942-7926 with any questions.

Sincerely,



Sofia McGuire

Enclosures

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REPLY TO PTO COMMUNICATION OF MARCH 18, 2003
RE: APPLICATION #09/853,190

The examiner again suggested in his communication of March 18, 2003, that applicant did not clearly define the device in the claims.

Applicant respectfully responds that the claims do not describe a device, but rather define a novel and unobvious method. The details are dependent on conditions, but would be known to those of ordinary skill in the art once the steps of the method are presented.

The claims are amended as follows in compliance with 37 CFR 1.121: PLEASE SEE ATTACHED.



TAWASSUL A. KHAN
C.E.O.

NONLINEAR SEISMIC IMAGING, INC.

3200 Southwest Freeway • Suite 2340 • Houston, Texas 77027
713.552.2727 • Fax: 713.521.2873
email: tkhan@houston.rr.com

2863

Sent Via Facsimile

Number of Pages: 15 including cover sheet

TO: Toan M. Le, EXAMINER
Company: US Patent and Trade Office
Fax Number: 703/872-9318

From: Sofia McGuire

Fax Number: 713/521-2873
Tel. Number: 713/552-2727

Date: 5/13/03 6:29:16 PM

RE: Application No. 09/853,190

REMARKS:

Please see attached based upon the USPTO Communication of March 18, 2003. If you have any questions concerning this transmission or the application, please contact me directly at 713/942-7926.

Thank you

Sincerely, Sofia McGuire

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PTO/SB/21 (03-03)

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| | | |
|---|------------------------|------------------|
| TRANSMITTAL FORM (to be used for all correspondence after initial filing) | Application Number | 09/853,190 |
| | Filing Date | 5-11-2001 |
| | First Named Inventor | Tawassul A. Khan |
| | Art Unit | 2862 |
| | Examiner Name | Toan M. Le |
| Total Number of Pages In This Submission | Attorney Docket Number | |

| ENCLOSURES (Check all that apply) | | |
|--|--|---|
| <input checked="" type="checkbox"/> Fee Transmittal Form <input checked="" type="checkbox"/> Fee Attached <input checked="" type="checkbox"/> Amendment/Reply <input checked="" type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input checked="" type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Response to Missing Parts/Incomplete Application <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53 | <input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation <input type="checkbox"/> Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) | <input type="checkbox"/> After Allowance Communication to Group <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below): • An Example of Crosswell Data Showing Frequency Side-lobes due to Permeability • Amended Claims • Communication/Reply • RCE |
| Remarks | | |

| SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT | |
|--|--------------------|
| Firm or Individual | Sofia K. McGuire |
| Signature | <i>[Signature]</i> |
| Date | |

| CERTIFICATE OF TRANSMISSION/MAILING | |
|--|--------------------|
| I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, Washington, DC 20231 on this date: 5-14-03 via FAX | |
| Typed or printed | Sofia K. McGuire |
| Signature | <i>[Signature]</i> |
| Date | 5-13-03 |

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.

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